

Anti-CaV1.3 Antibody
Catalog # ABO11601**Specification**

Anti-CaV1.3 Antibody - Product Information

Application	WB
Primary Accession	Q01668
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Voltage-dependent L-type calcium channel subunit alpha-1D(CACNA1D) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CaV1.3 Antibody - Additional Information

Gene ID 776

Other Names

Voltage-dependent L-type calcium channel subunit alpha-1D, Calcium channel, L type, alpha-1 polypeptide, isoform 2, Voltage-gated calcium channel subunit alpha Cav1.3, CACNA1D, CACH3, CACN4, CACNL1A2, CCHL1A2

Calculated MW

245141 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse

Subcellular Localization

Membrane ; Multi-pass membrane protein .

Tissue Specificity

Expressed in pancreatic islets and in brain, where it has been seen in cerebral cortex, hippocampus, basal ganglia, habenula and thalamus. Expressed in the small cell lung carcinoma cell line SCC-9. No expression in skeletal muscle. .

Protein Name

Voltage-dependent L-type calcium channel subunit alpha-1D

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CaV1.3(2146-2161aa

RDEEDLADEMICITTL), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-CaV1.3 Antibody - Protein Information

Name CACNA1D

Synonyms CACH3, CACN4, CACNL1A2, CCHL1A2

Function

Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1D gives rise to L-type calcium currents. Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group. They are blocked by dihydropyridines (DHP), phenylalkylamines, and by benzothiazepines.

Cellular Location

Membrane; Multi-pass membrane protein

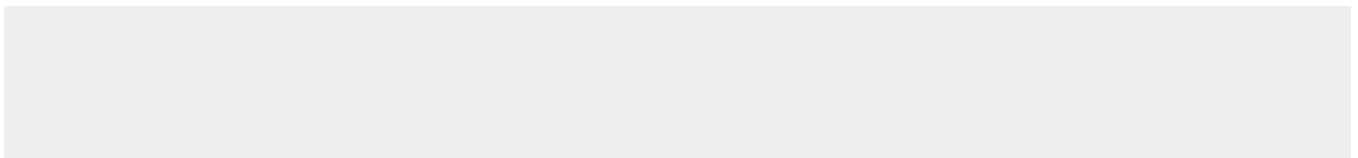
Tissue Location

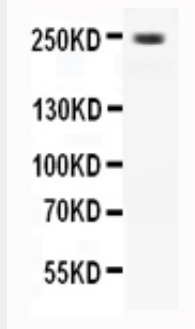
Expressed in pancreatic islets and in brain, where it has been seen in cerebral cortex, hippocampus, basal ganglia, habenula and thalamus. Expressed in the small cell lung carcinoma cell line SCC-9. No expression in skeletal muscle

Anti-CaV1.3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CaV1.3 Antibody - Images



Anti-CaV1.3 antibody, ABO11601, All Western blotting All lanes: Anti-CACNA1D(ABO11601) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 40ug Predicted bind size: 245KD Observed bind size: 245KD

Anti-CaV1.3 Antibody - Background

Cav1.3, also known as the calcium channel, voltage-dependent, L type, alpha 1D subunit(CACNA1D), is a human gene. It is mapped to 3p21.1. Voltage-dependent calcium channels mediate the entry of calcium ions into excitable cells, and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, and gene expression. Alpha-1D subunit can mediate DHP-sensitive, high voltage-activated, long-lasting calcium channel activity. CACNA1D can form L-type calcium channels with negative activation thresholds which is essential for normal auditory function and controlling of cardiac pacemaker activity.